REMARKS

The Office Action dated December 5, 2008, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Status of the Claims

Claims 20, 23, 28, 30, 36, 39, 43, 46, 50, 52, 53, 55, 59 and 62 have been amended to more particularly point out and distinctly claim the subject matter of the invention. No new matter has been added. Claims 20-62 are currently pending in the application and are respectfully submitted for consideration.

Allowable Subject Matter

Applicant notes with appreciation the Examiner's indication that claims 29-35, 60 and 61 would be allowable if rewritten in independent form and that claims 39-52 and 62 would be allowable if the rejections under 35 U.S.C. § 112, second paragraph, are overcome. Applicant kindly thanks the Examiner for his assistance. Applicant respectfully submits that the remaining claims also patentably distinguish over the cited art.

Improper Finality

In the previous Response filed August 1, 2008, Applicant noted on page 17 that claims 24, 26 and 28-35 were not rejected on art-based grounds. Applicant also noted that any art-based rejection of these claims presented in a next Office Action (such as the outstanding Office Action) would be presented for the first time, and as such, a next

Action presenting such rejections cannot be made final per 37 C.F.R. § 1.113. However, art-based rejections for claims 24, 26 and 28 were presented for the first time in the outstanding Office Action. This renders the finality of the outstanding Office Action improper and said finality must be withdrawn. Further reasoning is provided below.

37 C.F.R. § 1.113 only allows an Office Action to be made final when a proper rejection is given "second or subsequent" consideration on the record, and because the art-based rejections of claims 24, 26 and 28 were presented for the first time in the outstanding Office Action, the record is explicitly clear that no "second or subsequent" consideration was given. To present a rejection for the first time on the record and at the same time make the Office Action presenting said rejection final denies an Applicant a fair opportunity to review the reasoning behind the rejection, respond thereto, and have the Examiner address Applicant's arguments on the record. Further, were it the USPTO's policy to issue a final Office Action where a rejection is presented for the first time on the record (which it is clearly and explicitly not), Applicants would be encouraged to withhold notifying the Examiner of the failure to address certain claims until after a final Office Action is received, and then tactically present such arguments in response to a final rejection. This explicitly contradicts the USPTO's stated policy of compact prosecution.

Accordingly, it is respectfully submitted that the finality of the outstanding Office Action is improper and respectfully requested that the finality thereof be withdrawn.

Rejections under 35 U.S.C. § 112

On pages 2-4, the Office Action rejected claims 20-62 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. With respect to claims 20, 36, 53 and 62, the Office Action stated that the claims recite "that the application level message comprises an indication of conditions to deliver the signaling message which is vague and indefinite because the application level message comprises [an] indication of conditions to deliver the signaling message which is defined by 'application signaling' (see figure 3 step 4) and not the signaling message which is defined by 'PDP context' (see figure 3 steps 1 and 3)." Claims 20, 36, 53 and 62 have been amended to recite "deliver the application message" instead of "deliver the signaling message".

With respect to claims 23 and 55, the Office Action stated that the term "the application receiver process" has no antecedent basis. Claims 23 and 55 to recite "an application server" instead of "the application receiver process".

With respect to claims 28, 43, 50 and 59, the Office Action stated that the PDP context being embedded in SIP, RSVP or PPP signaling is vague and indefinite since this should be the other way around. Claims 28, 43, 50 and 55 have been amended to recite that the application message is embedded in the PDP context.

With respect to the rejection of claims 39 and 46 as allegedly being vague and indefinite because "it is [not] known the difference between 'send the encapsulated application level message' and 'forwarding the extracted content' which is extracted from the encapsulated application level message. Also, it is not known the use of 'conditions'

in the limitation of 'forwarding the extracted content...'", "forwarding" has been amended to "sending" and the rejection is moot. With respect to "conditions", Applicant respectfully submits that this term is clear and definite. Conditions for sending the extracted content are clearly discussed in the present specification. For example, the present specification discusses that in some embodiments, the encapsulated application message may include an address, delivery conditions and the specific type of application message (such as a SIP Registration message), among other data, as is discussed under the section "Activate PDP Context Request" and the associated table on pages 13 and 14 of the present specification.

Accordingly, it is respectfully submitted that the rejection is overcome and respectfully requested that the rejection be withdrawn.

On pages 3 and 4, the Office Action rejected claims 20, 36, 39, 53 and 62 under 35 U.S.C. § 112, second paragraph, as allegedly being incomplete for omitting essential steps. With respect to claims 20, 36, 53 and 62, the Office Action stated that the allegedly essential step "receiving the encapsulated application level message by the first network (SGSN) that copies the application level message from one message to another without being interpreted and transmitting said copied encapsulated application level message to a second network node (GGSN) (see specification page 7, lines 11-33 and Figure 3 step 3)" was omitted. Applicant notes that the SGSN in some embodiments of the claimed invention is merely a conventional SGSN and is peripheral to the claimed invention, serving as a workpiece. The SGSN copies the application level message

without interpreting it, as the Office Action noted, and the claimed invention does not need to recite the functions of the SGSN since a workpiece is not essential. The status of an SGSN as a workpiece is evidenced by the recitation in the independent claims that "said encapsulated application level message is transparent to devices of said access network transmitting said signaling message". Further, it is possible to have a system where the SGSN and GGSN are integrated into a single device and implementations exist where a separate SGSN is not present. In such a case, copying would not happen. Clearly, a feature is not essential if embodiments exist that do not require the feature.

With respect to claim 39, the Office Action stated that the allegedly essential steps "receiving an encapsulated application level message in a first network (SGSN); copying said application level message from one message to another without being interpreted and transmitting said copied encapsulated application level message to a second network node (GGSN) (see specification page 7 lines 11-33 and Figure 3 steps 1 and 3)" were omitted. Per the above, the SGSN is merely a workpiece and further, may be implemented in the same device as the SGSN in some embodiments. In such a case, the allegedly essential "receiving" and "copying" would not happen. Clearly, a feature is not essential if embodiments exist that do not require the feature.

Accordingly, it is respectfully submitted that the rejection is overcome and respectfully requested that the rejection be withdrawn.

Rejection under 35 U.S.C. § 102

Claims 20-22, 24, 26, 36, 37, 53, 54 and 58 were rejected under 35 U.S.C. § 102(a) as allegedly being anticipated by Greis et al. (WO 01/86974). The Office Action took the position that Greis et al. discloses all of the features of the rejected claims. Applicant respectfully submits that Greis et al. fails to disclose or suggest all of the features of the above-rejected claims. Reconsideration of the claims is respectfully requested.

Independent claim 20, from which claims 21-35 depend, recites a method including receiving an application level message from a sender application process to an access network signaling process, encapsulating the application level message in a signaling message of an access network and initiating transmission of the encapsulated application level message to a network node by transmitting the signaling message. The encapsulated application level message is transparent to devices of the access network transmitting the signaling message. The application level message includes an indication of conditions to deliver the application message. The application level message is sent after a packet data protocol context is accepted by a gateway.

Independent claim 36, from which claims 37 and 38 depend, recites an apparatus including receiving means for receiving an application level message from a sender application process to an access network signaling process, encapsulating means for encapsulating the application level message in a signaling message of an access network and transmitting means for initiating transmission of the encapsulated application level

message to a network node. The encapsulated application level message is transparent to devices of the access network transmitting the signaling message. The application level message includes an indication of conditions to deliver the application message. The application level message is sent after a packet data protocol context is accepted by a gateway.

Independent claim 53, from which claims 54-61 depend, recites an apparatus including a processor configured to receive an application level message from a sender application process to an access network signaling process, encapsulate the application level message in a signaling message of an access network and initiate transmission of the encapsulated application level message to a network node. The encapsulated application level message is transparent to devices of the access network transmitting the signaling message. The application level message includes an indication of conditions to deliver the application message. The application level message is sent after a packet data protocol context is accepted by a gateway.

Greis et al. generally discusses "provision of end-to-end data bearers in a communication system" (page 1, lines 6 and 7). Greis et al. discusses:

> [A] method in a communication system for controlling at least one data bearer between a first node and a second node of the communication system, comprising: generating a message that associates with provision of control of a data bearer between the nodes; adding to the message information that associates with a quality of service function of the data bearer; transporting the message between the nodes; and assigning a node with responsibility of controlling the quality of service function of the data bearer based on said information added in the message.

(Page 6, lines 3-12). Applicant submits that Greis et al. tries to determine what the roles are in QoS negotiation of a mobile terminal and a network. An embedded QoS message is sent from a mobile "QoS manager" to a gateway. Thus, Greis et al. proposes a way to improve GPRS or access network signaling.

Independent claim 20 recites, in part, that "said application level message is sent after a packet data protocol context is accepted by a gateway." Independent claims 36 and 53, which each have their own scope, recite similar features. Applicant respectfully submits that the cited art fails to disclose or suggest these features.

Per the above, the application message of some embodiments of the claimed invention is forwarded after a packet data protocol (PDP) context (*i.e.*, access network connection) is accepted by a gateway. In some embodiments, one part of accepting a PDP context is verifying that the gateway can provide a QoS requested by an application message. Access network signaling including QoS information (which may have been previously negotiated for the access network) is processed in the gateway before the application level message is sent. However, as noted above, Greis et al. tries to determine what the roles are in QoS negotiation of a mobile terminal and a network and an embedded QoS message is sent from a mobile QoS manager to a gateway. As such, the operations in Greis et al. are carried out before operations of some embodiments of the claimed invention.

One objective of some embodiments of the present invention is to reduce the number of round trips needed to establish a connection by piggybacking application level

signaling inside of GPRS signaling. An application may, for example, run on a laptop connected to a mobile terminal or in the mobile terminal itself. This is contrary to Greis et al., where the application is not a logical part of the access network and is not a low level function of a mobile terminal. The application originates the message and sends the message to an application server. This is also contrary to Greis et al., where a QoS message is sent to a GGSN and the application is not a part of the access network. Greis et al. and the claimed invention are directed to solving different problems, and in some situations, both could be implemented together. For instance, page 15, line 33, through page 16, line 11, of the present application discusses that in some embodiments, the QoS of the application message would be accepted based on the QoS **established earlier** for the Radio Access Bearer.

A GGSN performs QoS negotiation with user equipment in normal GPRS. In addition, the GGSN may initiate an RSVP negotiation with an external server. Note that the GGSN will interpret the QoS sent by the mobile terminal and derive from the QoS the right parameter for the RSVP message. That is why an RSVP message is initiated (but not forwarded). In the case of Greis et al., there is no application message carried out in access network signaling. As such, no message is forwarded.

A mobile IP address has been carried in the PDP context activation in GPRS specifications since 1997 and is a normal part of connecting to a network. Normally thereafter, an application sends a message to an application server where the destination address is included. However, some embodiments of the claimed invention are able to

save round trips when connecting since the application level message and the application server address are embedded in the access network signaling.

Independent claim 20 also recites that "said encapsulated application level message is transparent to devices of said access network transmitting said signaling message". Independent claims 36, 53 and 62, which each have their own scope, recite similar features. Applicant respectfully submits that these features are not found in the art of record.

Applicant submits that in some embodiments of the claimed invention, stacks are mixed so that higher layer signaling (such as SIP register) is piggybacked with lower level signaling PDP context activation. As stated on page 4, lines 23-31, of the present specification:

> A key feature of [some embodiments of] the present invention is to maintain logical independence between the application layer (e.g. SIP or WAP - Wireless Application Protocol) and the access layer (e.g. GPRS). This independence is based on the fact that the access layer does not need to understand application signaling. It only needs to know how to forward [the application level signaling]. Therefore, any new application could obtain the benefit of this functionality without further changes needed in the access layer.

Thus, a PDP context and SIP session can be established with only a single round trip over the radio. The art of record is silent as to these features.

Claims 21, 22, 24, 26, 37, 54 and 58 depend from independent claims 20, 36 or 53 and add further features thereto. Thus, the arguments above with respect to the independent claims also apply to the dependent claims.

Per the above, <u>Greis et al.</u> fails to disclose or suggest all of the features of the above-rejected claims under 35 U.S.C. § 102(a). Accordingly, it is respectfully submitted that the rejection is overcome and respectfully requested that the rejection be withdrawn.

Rejection under 35 U.S.C. § 103

Claims 23, 25, 27, 28, 38, 55, 57 and 59 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over <u>Greis et al.</u> in view of <u>Dorenbosch et al.</u> (U.S. Publication No. 2003/0217174). Claims 23, 25, 27, 28, 38, 55, 57 and 59 depend from independent claims 20, 36 or 53 and add further features thereto. Nothing is cited or found in <u>Dorenbosch et al.</u>, which generally discusses "a method and apparatus for establishing an IP (internet protocol) session between a host using SIP (session initiation protocol) and a device without an IP address" (paragraph [0001]), that overcomes the deficiencies of <u>Greis et al.</u> discussed above with respect to the independent claims. Thus, the arguments above with respect to the independent claims also apply to claims 23, 25, 27, 28, 38, 55, 57 and 59.

Accordingly, it is respectfully submitted that the rejection is overcome and respectfully requested that the rejection be withdrawn.

Conclusion

For at least the reasons presented above, it is respectfully submitted that claims 20-28, 36-38, 53-55 and 57-59 also patentably distinguish over the cited art. Accordingly, it is respectfully requested that the claims be allowed and the application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, Applicant's undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

Michael A. Leonard II
Attorney for Applicant
Registration No. 60,180

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Vienna, Virginia 22182-6212
Telephone: 703-720-7800
Fax: 703-720-7802

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